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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/515,872	02/29/2000	Isabelle Morvan	1807.1094	1542

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EXAMINER	
WINDER, PATRICE L	

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/515,872	MORVAN ET AL.	
	Examiner	Art Unit	
	Patrice Winder	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19 and 25-48* is/are rejected.

7)☒ Claim(s) *20-24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code 102 not included in this action can be found in a prior Office action.

2. Claims 1-3, 6-8, 10-13, 24-27 and 29-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Sherman, USPN 5,974,236 (hereafter referred to as Sherman).

Regarding claim 1, Sherman taught a method of communicating between communication stations adapted to communicate with each other when at least one of said communication stations supplies a synchronization signal (column 18, lines 44-50, 63-66),

the station then functioning in base station mode and the stations not supplying a synchronization signal but synchronizing on a synchronization signal sent by a station functioning in base station mode then functioning in mobile station mode (column 18, lines 59-66),

wherein the method includes a request operation during which a first base station transmits, to a mobile station, a request for the storage in memory and transmission, by the mobile station, of a message to a communication station for which the message is intended (column 4, lines 6-16, column 7, lines 22-30) and which is not synchronized with the first base station (column 19, lines 10-18).

Regarding dependent claim 2, Sherman taught further including a response operation during which said mobile station transmits, to said first base station, a

message accepting or refusing transmission of said message to the message destination station (column 12, lines 21-38).

Regarding dependent claim 3, Sherman taught when said mobile station transmits an acceptance message to the first base station (column 12, lines 21-33, column 7, lines 22-27), it next performs a detachment operation, during which said mobile station desynchronizes from the first base station (column 17, lines 55-60).

Regarding dependent claim 6, Sherman taught as a preliminary to said request operation, the first base station performs an operation of selecting, from a location table, the mobile station which is the destination of the request to store in memory and to transmit (column 5, lines 6-13).

Regarding dependent claim 7, Sherman taught if during the response operation the mobile station transmits to the first base station a message refusing transmission of said message, the base station performs a new operation of selecting, from a location table, a mobile station which is the destination of the request to store in memory and to transmit (column 12, lines 33-41).

Regarding dependent claim 8, Sherman taught as a preliminary to the selection operation, the first base station performs an operation of determining synchronization or not of the message destination station with the first base station (within sub-network, column 18, lines 59-63, column 12, lines 3-26) and only when the message destination station is not synchronized with the first base station, an operation of selecting a mobile station which is the destination of the request to store in memory (column 19, lines 10-20).

Regarding dependent claim 10, Sherman taught during the request operation, the first base station transmits, to the mobile station, the content of the message to be transmitted to the message destination station (column 5, lines 51-59).

Regarding dependent claim 11, Sherman taught during the request operation, the first base station transmits, to the mobile station, an identifier for the message destination station (column 5, lines 59-64).

Regarding dependent claim 12, Sherman taught during the request operation, the first base station transmits, to the mobile station, an identifier for the first base station (column 5, lines 63-64).

Regarding dependent claim 13, Sherman taught during the request operation, the first base station transmits, to the mobile station, an identifier for a source station which supplies, to the first base station, the message to be transmitted to the message destination station (column 5, lines 59-64).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code 103(a) not included in this action can be found in a prior Office action.

4. Claims 4-5, 9, 14-19, 28, 33-36 and 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman in view of Diepstraten et al., USPN 5,991,287 (hereafter referred to as Diepstraten).

Regarding dependent claim 4, Sherman taught following said detachment operation, said mobile station performs an attachment operation during which it

synchronizes with a second base station (column 17, lines 55-60). Sherman does not specifically without the two base stations synchronizing with each other. However, Diepstraten taught the two base stations not synchronizing with each other (column 1, lines 47-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Diepstraten's second base station not synchronized to a first base station in Sherman's dynamically reconfigurable communications network would have improved handover in the communications network. The motivation would have been to prevent lost of information when a handover is attempted.

Regarding dependent claim 5, Sherman taught following said attachment operation, the mobile station performs a second transmission operation, during which said mobile station transmits said message to the message destination station (column 19, lines 13-18).

Regarding dependent claim 9, Sherman taught during the operation of determining the synchronization or not of the message destination station with the first base station (column 18, lines 59-63), the base station performs an operation of reading, in a location table, the operating mode of the message destination station (column 12, lines 3-26),

when the message destination station is functioning in mobile station mode, during said reading operation, the base station performs an operation of reading the identity of a base station with which the message destination station is synchronized (column 19, lines 18-22) and, when the base station with which the message destination

station is synchronized is not the first base station, it is determined that the message destination station is not synchronized with the first base station (not in sub-network, column 19, lines 10-18).

Sherman does not specifically teach when the message destination station is functioning in base station mode, it is determined that the message destination station is not synchronized with the first base station. However, Diepstraten taught when the message destination station is functioning in base station mode, it is determined that the message destination station is not synchronized with the first base station (column 1, lines 47-55). For motivation for combination see claim 4, above.

Regarding claim 14, Sherman taught a method of communicating between communication stations adapted to communicate with each other when at least one of the communication stations supplies a synchronization signal (column 18, lines 44-50), the station then function in base station mode and the stations not supplying a synchronization signal but synchronizing on a synchronization signal sent by a station functioning in base station mode then functioning in mobile station mode (column 18, lines 59-60), wherein the method includes:

a first operation of receiving a message, during which a mobile station synchronized with a first base station receives a message coming from the first base station (column 4, lines 6-16, column 7, lines 22-30),

an operation of detachment and attachment, during which the mobile station synchronizes with a second base station (column 17, lines 55-65), and

a second transmission operation, during which the mobile station transmits the message to the second base station (column 19, lines 16-18). Sherman does not specifically teach without the two base stations synchronizing with each other. However, Diepstraten taught without the two base stations synchronizing with each other. For motivation for combination see claim 4, above.

Regarding dependent claim 15, Sherman taught following the message reception operation and preliminary to the detachment and attachment operation, the mobile station performs an availability test during which it determines whether a communication would be interfered with by the detachment and attachment operation and, if during the availability test it is determined that no communication would be interfered with by a detachment and attachment operation, the detachment and attachment operation is performed (column 17, lines 47-63).

Regarding dependent claim 16, Sherman taught during the availability test, the mobile station determines whether or not it is participating in a current communication and, if it is participating in a current communication, it is determined that communication would be interfered with by the detachment and attachment operation (column 18, lines 10-18).

Regarding dependent claim 17, Sherman taught following the message reception operation and preliminary to the detachment and attachment operation, the mobile station performs an availability test during which it determines whether or not a quantity of energy available to it is greater than a predetermined quantity and, if during the availability test it is determined that the quantity of energy is greater than the

predetermined quantity, the detachment and attachment operation is performed (column 17, lines 55-60).

Regarding dependent claim 18, Sherman taught preliminary to the detachment and attachment operation, the mobile station performs a response operation during which the mobile station, transmits, to the first base station, a message accepting transmission of the message (column 18, lines 10-18).

Regarding dependent claim 19, Sherman taught the message represents traffic between the mobile stations synchronized on the first base station and the first base station (routing list from origination to destination in sub-network, column 5, lines 63-64).

Regarding claims 36, Sherman taught network, characterized in that it has at least two devices (column 4, lines 6-10).

5. Claims 37-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman and Diepstraten as applied to claim 14 above, and further in view of Nago, USPN 6,078,609 (hereafter referred to as Nago).

Regarding dependent claim 37-45, Sherman a communications station characterized in that it has a device according to any one of Claims 24 and 33. Sherman does not specifically teach a particular communications device. However, Nago Telephone, Photographic apparatus, Printer, Scanner, Camera, Computer, Facsimile machine, Television receiver, or Audio/video player, (column 3, lines 23-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Nago's communications devices in Sherman's dynamically reconfiguration communications network would have improved system effectiveness.

The motivation would have been because any of Nago's communication devices would function equivalently in a wireless communications network.

6. The language of claims 24-35, 46-48 is substantially the same as claims 1-19. Therefore, claims 24-35, 46-48 is substantially the same as previously rejected claims 1-19.

Response to Arguments

7. Applicant's arguments filed July 6, 2004 have been fully considered but they are not persuasive.

8. Applicant argues – "...Sherman ... is not seen to disclose or suggest that a mobile station (or remote communication mode) receives a message from a first base station (or central communication node) for transmission by the mobile station to a communication station which is not synchronized with the first base station".

a. As support, applicant further argues " ... a mobile station within the sub-network does not act as a repeater, since it does not receive and transmit messages. See Sherman, column 17, lines 66-67. In contrast, the mobile station of the present invention does receive a message and transmits it to another stations." Following this disclosure, Sherman taught that another method of accomplishing Sherman's invention where the mobile communication node is able to turn a "repeater" function on and off. Sherman's repeater function allows the mobile communication mode to send and transmit messages. See column 18, lines 19-38.

Allowable Subject Matter

9. Claims 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 20-24 are objected to because of the inclusion of the following limitation in the respective independent claims, the message destination is the second base station, and the second base station performs, on receipt of the message, an operation of determining the total traffic during which it determines whether or not the sum:

of traffic between the mobile stations synchronized on the first base station and the first base station, on the one hand, and

the traffic between traffic synchronized on the second base station and the second base station, on the other hand,

is less than a predetermined value or the inclusion of the following:

the message destination station is the second base station, and on reception of the message, the second base station performs a first operation of determining the distribution of traffic between the two base stations during which the second mobile determines whether or not:

on the one hand, the traffic between the mobile stations is synchronized on the first base and the first base station is less than a predetermined value, and

on the other hand, the traffic between the mobile stations synchronized on the second base station is greater than a predetermined value.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is 703-305-3938 until October 27, 2004 and 571-272-3935 thereafter. The examiner can normally be reached on Monday-Friday, 10:30 am-7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705 until October 26, 2004 and 571-272-3896 thereafter. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrice Winder
Primary Examiner
Art Unit 2145

October 1, 2004